

# Fit To Fight

EARL HARBOR NAVAL SHIPyard has played a crucial role in America's rise as an Asia-Pacific power since 1908. The history of this Shipyard is the stuff of legends, and the Navy's plans for its future are both bold and vital to America's national security.

Pearl is our nation's largest ship repair facility between the West Coast of the United States and the Far East. It is strategically located roughly two weeks' steaming time from the potential "hot spots" in the Asia-Pacific region. As the largest industrial employer in Hawaii, it is crucial to the social and economic development of the state.

To understand how Pearl will continue to play a vital role in America's security interests in the Asia-Pacific Region for its second century, it is useful to look at Pearl's history, the shipyard today, and our near-\$1 billion modernization plan.

#### THE FIRST 100 YEARS

Congress approved legislation that established "Navy Yard Pearl Harbor" on May 13, 1908. Since then, our Shipyard grew from a simple "coaling and repair station" to become The "No Ka Oi" (The Best) Naval Shipyard" – strategically vital to our nation, indispensable to the state of Hawaii, and the employer of choice for many of the state's residents.

By Captain Greg R. Thomas

## PEARL HARBOR NAVAL SHIPYARD'S VISION 2035 WILL MAKE THE FACILITY A 21ST CENTURY SHIPYARD FOR A 21ST CENTURY FLEET.







Over its first century, the shipyard at Pearl Harbor was key to winning World War II in the Pacific and it played an important role in five other wars. Along the way, our workers earned national-level awards for environmental stewardship and safety programs, assisted in America's Project Mercury Space Program and Antarctic exploration, and supported the Navy in its transition from steam to nuclear propulsion.

From victory against genocidal oppression to the depths of the oceans and to outer reaches of space, Pearl Harbor Naval Shipyard's presence has been felt. That is quite a legacy.

#### THE SHIPYARD TODAY

The Shipyard, situated five miles west of downtown Honolulu, occupies 148 acres, including 110 acres within the high-security "Controlled Industrial Area." The Shipyard has 176 buildings and 38 other structures that include dry docks, piers, and wharfs. The estimated plant value of the facility is \$2.1 billion. Business at the Shipyard now totals \$600 million annually.

The four dry docks, including one double dock, are the heart of our Shipyard and are what makes it a national treasure. The oldest dry dock was completed 90 years ago; the others during WWII.

# 'A Date Which Will Live In Infamy'

On Dec. 7, 1941, Japanese aircraft attacked Pearl Harbor in two massive waves, damaging or sinking 18 of the major warships present. That morning, many Shipyard workers evaded bombs and machinegun fire to help sailors and marines and to put out hundreds of fires. Many were cited for their actions during and after the attack.

Yard workers quickly recovered from their shock of the sneak attack and rolled up their sleeves to return 15 of those 18 damaged ships to the war and performed 10,000 ship repairs. The speed and the quality of Shipyarders work during World War II earned them the motto, "We Keep Them Fit to Fight."

Perhaps most significant was the 72-hour repair job on the battle-damaged carrier, USS Yorktown. This work allowed her to fight in the pivotal battle of the Pacific War: the Battle of Midway. Engineers said the repair work would take four months. Shipyarders, working 24-hour shifts, had her "fit to fight" in 72 hours. Yorktown joined two other U.S. carriers – evening the odds against four Japanese carriers – and made the difference between victory and defeat. This battle turned the tide of the war.

#### **FEATURE**



The majority of the shipyard work – 90 percent – consists of maintenance on submarines, with the remaining 10 percent on surface vessels. Most of this work is scheduled maintenance for periods of several months up to several years.

Some work, however, is "emergent": work that results from damage or enroute maintenance problems on vessels. For example, Shipyard workers have won praise for their success performing urgent repairs on Navy vessels in recent years, such as USS San Francisco in Guam 2005 and the USS Newport News in the Persian Gulf in 2007.

Under a unique public-private venture authorized by U.S. law, commercial ships, such as the Pacific Princess and the Pride of America cruise liners and the SS Matsonia cargo ship, have been repaired at the Shipyard as well. We also perform maintenance on foreign ships, particularly during major exercises such as the biannual Rim of the Pacific (RIMPAC) exercise that is held in Hawaiian waters.

Other services we provide include "fly

# Our People, Our Future

Today, Pearl Harbor Naval Shipyard is developing a diverse, highly professional workforce. As direct supporters of the finest fighting force in the world, our most important asset is the quality of the people we hire, develop, and reward. Our people make Pearl Harbor a strong, capable shipyard. They are dedicated to continuous improvement of their performance.

We employ more than 4,200 civilian employees, including apprentices from a variety of trades. In additional, our 450-plus uniformed personnel lend our Shipyard a sea warrior's perspective.

To ensure the Shipyard's workforce is capable of meeting the needs of the 21st century fleet, we have put into place a multi-faceted program that ranges from middle-school and high school tutoring, to support of the state's robotics competitions, to a comprehensive new-engineer program that provides college tuition to top-performing apprentices who desire to become engineers and provides scholarships to robotics competition winners.

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away" support for operations worldwide, technical assessments, calibration, hazardous material management and hazardous waste disposal, cryptological equipment repair, regional maintenance and modernization coordination, oil analysis, and natural disaster and emergency response. We also train U.S. and foreign officers and sailors in shipyard management and maintenance skills.

The Shipyard's industrial environmental program is nationally recognized as one of the best in the Department of Defense. In recent years, the Department of the Navy recognized Pearl Harbor as the best large installation for safety and we earned the Voluntary Protection Program "Star" for our superior safety program.

#### SERVICING THE 21ST CENTURY FLEET

As our Shipyard enters its second century, we are faced with great opportunities, but also great challenges.

Great opportunities lie in the fact that the U.S. Navy will increase the number of submarines in the Asia-Pacific Region to 60 percent of the Navy's force, with VIR-GINIA-class submarines begin moving to Hawaii this summer. This means steady or increasing workloads for our workforce. The Shipyard will be responsible for a significant portion of the Pacific Fleet: At Pearl Harbor alone, there will be nearly 30 surface ships and submarines to maintain. Guam has three submarines.

Worldwide, our Navy is tasked with vast responsibilities. We must fulfill tasks over hundreds of millions of square miles with only 283 ships and submarines, while we build up to 313 ships and submarines. So when these vessels require maintenance and repair, it is vital to our national security that they be serviced and returned to the fleet on schedule and on budget.

New types of vessels will be entering the fleet, ranging from VIRGINIA-class submarines to the Littoral Combat Ships to the newest class destroyer, DDG-1000. These vessels require new expertise and technology for maintenance and repair.

So our Shipyard workers have a great future ahead.

Still, great challenges lie in the fact that Pearl is an early 20th century facility trying to service a 21st century fleet.

The majority of Shipyard structures is old and in desperate need of modernization, and our facilities layout is inefficient, designed for work flow more suited to the Navy of World War II, and not for the maintenance processes today. This inefficiency causes delays in completion of critical projects, such as submarine overhauls and surface ship maintenance, and waste of critically short resources to maintain the aging facilities.

The majority of industrial structures at Pearl Harbor Naval Shipyard were constructed between 1913 and 1945. Many are old, inefficient and, in some cases, uninhabitable.

To meet this challenge, we have developed a multi-year modernization plan called "Vision 2035," which calls for the consolidation of key functions, such as engineering as well as production shops, adjacent the Shipyard's primary work areas: the drydocks and piers.

In general, the plan proposes 30 projects. Some of these will require entirely new construction and some will simply reuse current buildings. The plan also provides the means for maintaining the Shipyard's four drydocks and increasing capacity for our two wet berths.

Modernization will be expensive, perhaps as much as \$800 million over the next 26 years. But it is an investment that must be made.

#### THE NEXT 100 YEARS

Pearl Harbor Naval Shipyard has been crucial to the success of our Navy and the security of our nation over the past 100 years. As America and our Navy face the serious global and regional challenges of the 21st century, our Shipyard will remain equally important to our national security.

The investment we are making in our Shipyard workforce, our most vital asset, needs to be coupled with similar investments in our shipyard infrastructure. We have a solid plan for this investment, and we're making progress in fulfilling it.

With the initiation of our modernization plan, we have defined the way ahead for our facility. We have taken the essential first steps to ensure our Shipyard will be able to meet the challenges of the 21st century.

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